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PP117 Scent from *Cattleya wallisii*, an orchid from the Amazon

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Abstract

The genus *Cattleya* (Orchidaceae) comprises around 60 species with neotropical distribution. Many are considered to be endangered species, mostly due to anthropic pressure. Several species have been studied regarding their volatile composition [1]. *Cattleya wallisii* (Linden) Linden ex Rehb.f. (Orchidaceae) is an epiphyte herb native to the Amazon [2]. To the best of our knowledge, this is the first investigation on the volatiles of *C. wallisii*.

The plant was originally collected in the Amazon area. A voucher was deposited at the herbarium of the University of Brasilia (UBPires, JM8271). A greenhouse cultivated specimen was covered with a roaster (cooking food) plastic bag, and the volatiles were collected by dynamic headspace and trapped into a homemade micro tube (2 cm x 1 mm i.d.) filled with Porapak Q. After the collection period (1 h), 50 µL of hexane were used to wash the volatiles to an ampoule. The same flower was sampled three times, in consecutive days, at the same day period (14 to 15 h). Octadecane was added as internal standard. GC-FID and GC-MS analyses were performed in Agilent 7890B and 5975C, respectively. Theoretical response factors were used to correct FID areas. Identification was based on mass spectra and linear retention indices.

The main compounds found in the volatile fraction were methyl salicylate (27.7%), nerol (14.0%), (*E,E*)- α -farnesene (6.2%), β -bisabolene (6.0%), and linalool (4.9%). Many acetyl and benzyl esters were also identified. Methyl salicylate was reported to be the major compound in the volatiles from *Cattleya velutina*, and it is also present in the scents from *C. schilleriana*, *C. jenmanii* and *C. mossiae* (1).

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